

WHAT IS CLAIMED:

- 1 1. A node for grooming low capacity client signals into a high capacity signal,
2 comprising:
 - 3 an interface to a high capacity trunk for coupling to a type one node; and
 - 4 an interface to a high capacity trunk for coupling to a type two node;
 - 5 wherein only a portion of those low capacity client signals destined for the type
 - 6 one node are groomed into the high capacity trunk to the type two node.
- 1 2. The apparatus of claim 1 wherein the groomed portion is zero.
- 1 3. The apparatus of claim 1 wherein the type two node is a high traffic node.
- 1 4. The apparatus of claim 1 wherein the type one node is a cable station and the
2 type two node is a central office.
- 1 5. The apparatus of claim 1 wherein the low capacity client signals are E1 (PDH
2 (plesiochronous digital hierarchy)) type signals and the high capacity signal is a
3 synchronous transport module (STM-1) signal.
- 1 6. Apparatus for performing selective grooming of client signals, the apparatus
2 comprising:
 - 3 a node coupled (a) directly to a first node via a high capacity trunk, and (b) to a
4 second node via a high capacity trunk such that only a portion of the client signals
5 destined for the first node are groomed into the high capacity trunk to the second node.
- 1 7. The apparatus of claim 6 wherein the groomed portion is zero.
- 1 8. The apparatus of claim 6 wherein the first node is a low traffic node and the
2 second node is a high traffic node.
- 1 9. The apparatus of claim 6 wherein the first node is a cable station and the second
2 node is a central office.

1 10. The apparatus of claim 6 wherein the client signals are E1 (PDH
2 (plesiochronous digital hierarchy)) type signals and the high capacity trunk supports a
3 synchronous transport module (STM-1) signal.

1 11. A method for use in performing selective grooming, the method comprising
2 the steps of:

3 determining an aggregate amount of traffic between two landing sites; and
4 if the determined aggregate amount of traffic is greater than a predetermined
5 portion of a high capacity trunk, provisioning a trunk for directly connecting the two
6 landing sites.

1 12. The method of claim 11 wherein the landing sites are cable stations of an
2 undersea cable network.

1 13. The method of claim 11 wherein the aggregate amount of traffic represents
2 E1 (PDH (plesiochronous digital hierarchy)) type signals and the high capacity trunk
3 supports a synchronous transport module (STM-1) signal.

1 14. A method for use in node, the method comprising the steps of:
2 receiving low capacity client signals;
3 selectively grooming a portion of the received low capacity client signals into a
4 high capacity trunk for transmission to a first type of node; and
5 transmitting others of the low capacity client signals over an other high capacity
6 trunk directly coupled to a second type of node

1 15. The method of claim 14 wherein the low capacity client signals represents E1
2 (PDH (plesiochronous digital hierarchy)) type signals and the high capacity trunk
3 supports a synchronous transport module (STM-1) signal.

1 16. The method of claim 14 wherein the groomed portion is zero.

1 17. The method of claim 14 wherein the second type of node is a cable station and

2 the first type of node is a central office.

1 18. The method of claim 14 wherein the second type of node is a low traffic node
2 and the first type of node is a high traffic node.